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PROBABILISTIC HYDROLOGIC OUTLOOK  
NATIONAL WEATHER SERVICE DES MOINES IA  
1220 PM CST FRI FEB 19 2010

...SPRING FLOOD AND WATER RESOURCES OUTLOOK...

\*\* IMPORTANT...HIGH RISK OF SIGNIFICANT FLOODING CONTINUES \*\*

SPRING FLOOD AND WATER RESOURCES OUTLOOK NUMBER 2

THIS FLOOD OUTLOOK IS FOR THE NWS DES MOINES SERVICE AREA. IT COVERS THE  
TIME PERIOD FROM LATE FEBRUARY THROUGH LATE MAY 2010. IT INCLUDES THE  
FOLLOWING RIVERS AND THEIR TRIBUTARIES IN NORTH CENTRAL...CENTRAL AND  
SOUTH CENTRAL IOWA...

IOWA...CEDAR...SKUNK...DES MOINES...RACCOON...NISHNABOTNA...  
102...THOMPSON AND CHARITON RIVERS

...FLOOD OUTLOOK HIGHLIGHTS...

\* THERE IS A CONTINUED HIGH RISK OF SIGNIFICANT FLOODING IN MANY AREAS.  
THE RISK HAS INCREASED SINCE THE FIRST OUTLOOK ON JANUARY 29TH. THE RISK  
OF FLOODING IS MUCH ABOVE NORMAL AT MOST LOCATIONS. THE RISK IS HIGHEST  
IN THE DES MOINES...RACCOON...IOWA AND CEDAR RIVER BASINS...AND  
ESPECIALLY ACROSS THE NORTHWEST HALF OF THE DES MOINES SERVICE AREA.

\* THE TIME PERIOD WHEN FLOODING IS MOST LIKELY EXTENDS FROM MID MARCH  
INTO LATE APRIL. FLOODING MAY OCCUR EARLIER OR LATER THAN THIS TIME  
PERIOD...DEPENDING ON WEATHER ACTIVITY AND TRENDS.

\* THERE IS AN ABOVE NORMAL RISK OF FLOODING FROM ICE JAMS. ANY ICE JAMS  
WHICH DO OCCUR MAY RESULT IN LOCALLY HIGHER RIVER STAGES...AND RAPID  
RIVER RISES. THIS OUTLOOK DOES NOT TAKE INTO ACCOUNT POTENTIAL FLOODING  
FROM ICE JAMS. ANY FLOODING FROM ICE JAMS WOULD BE ABOVE AND BEYOND THE  
FLOODING POTENTIAL INDICATED IN THIS OUTLOOK.

\* THE HIGHER THAN NORMAL RISK OF FLOODING IS NOT CONFINED JUST TO AREAS  
WITH AN ABOVE NORMAL SNOW PACK. HIGH SOIL MOISTURE VALUES SUGGEST A  
HIGHER THAN NORMAL RISK OF FLOODING ALSO IN AREAS THAT HAVE LITTLE TO NO  
SNOW COVER.

\* THE FLOODING POTENTIAL IS MORE SENSITIVE THAN NORMAL TO THE OCCURRENCE

AND TIMING OF WEATHER EVENTS SUCH AS RAPID WARM UPS AND HEAVY PRECIPITATION. THUS...IT IS MORE IMPORTANT THAN NORMAL TO CLOSELY MONITOR THE POTENTIAL FOR THESE AND RELATED WEATHER EVENTS. THEY MAY FURTHER INCREASE THE RISK OF FLOODING...BEYOND WHAT THIS OUTLOOK INDICATES.

TABLE 1 BELOW LISTS THE PROBABILITIES OF REACHING FLOOD STAGE /MINOR FLOODING/...AS WELL AS MODERATE AND MAJOR FLOOD LEVELS FOR EACH FORECAST POINT.

...TABLE 1...PROBABILITIES FOR MINOR...MODERATE AND MAJOR FLOODING...

VALID FEB. 21 2010 - MAY 22 2010

LOCATION	-----FLOOD STAGES-----						DEP FROM NORMAL OF REACHING FLOOD STAGE	
	MINOR STG	PCT	MODERATE STG	PCT	MAJOR STG	PCT		
IOWA RIVER								
ROWAN	11	>98%	14	82%	16.5	9%	44%	GREATER
MARSHALLTOWN	18	86%	19	60%	21	18%	73%	GREATER
CEDAR RIVER								
WAVERLY	11.5	26%	15	4%	17	1%	22%	GREATER
JANESVILLE	11	31%	13	19%	15	8%	20%	GREATER
CEDAR FALLS	88	96%	90	91%	93	45%	45%	GREATER
WATERLOO	12	96%	15	86%	19	24%	61%	GREATER
W FK CEDAR RIVER								
FINCHFORD	12	>98%	14	80%	16	37%	56%	GREATER
WINNEBAGO RIVER								
MASON CITY	7	>98%	10	49%	14	9%	56%	GREATER
SHELL ROCK RIVER								
SHELL ROCK	12	>98%	13	85%	15	21%	56%	GREATER
BEAVER CREEK								
NEW HARTFORD	10	77%	12	19%	14	1%	46%	GREATER
S SKUNK RIVER								
AMES 3N	14	4%	15	1%	16	<2%	3%	GREATER
AMES HWY 30	20	88%	23	32%	24	14%	59%	GREATER
COLFAX	17	82%	19	34%	21	14%	66%	GREATER
OSKALOOSA	20	85%	21	60%	24	11%	66%	GREATER
SQUAW CREEK								
AMES	9	57%	12	32%	15	4%	48%	GREATER

## DES MOINES RIVER

ESTHERVILLE	7	>98%	10	>98%	14	31%	46%	GREATER
EMMETSBURG	10	>98%	11	96%	13	34%	62%	GREATER
HUMBOLDT	8	>98%	9	>98%	12	80%	54%	GREATER
FORT DODGE	10.5	>98%	13	88%	14	68%	76%	GREATER
STRATFORD	14	>98%	18	>98%	22	90%	44%	GREATER
DSM-2ND AVE	23	59%	25	50%	27	41%	57%	GREATER
DSM-SE 6TH	24	96%	26	78%	30	44%	66%	GREATER
EDDYVILLE	61	>98%	66	16%	69	9%	61%	GREATER
OTTUMWA	11	55%	12	32%	15	14%	42%	GREATER

## E FK DES MOINES RIVER

ALGONA	14	>98%	17	>98%	22	47%	72%	GREATER
DAKOTA CITY	20	80%	22	41%	24	23%	76%	GREATER

## BOONE RIVER

WEBSTER CITY	12	68%	15	21%	17	6%	65%	GREATER
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## BEAVER CREEK

GRIMES	12	78%	14	6%	16	<2%	61%	GREATER
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## N RACCOON RIVER

JEFFERSON	19	49%	20	32%	21	13%	44%	GREATER
PERRY	15	>98%	17	>98%	20	82%	66%	GREATER

## S RACCOON RIVER

REDFIELD	20	<2%	24	<2%	27	<2%	NEAR NORMAL
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## RACCOON RIVER

VAN METER	16	95%	19	80%	21	31%	71%	GREATER
DSM-HWY 28	32	>98%	36	72%	39.5	18%	50%	GREATER
DSM-FLEUR DR	12	>98%	14	91%	20	29%	50%	GREATER

## NORTH RIVER

NORWALK	18	96%	23	1%	25	<2%	52%	GREATER
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## MIDDLE RIVER

INDIANOLA	19	26%	24	1%	25	1%	12%	GREATER
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## SOUTH RIVER

ACKWORTH	26	<2%	29	<2%	31	<2%	NEAR NORMAL
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## CEDAR CREEK

BUSSEY	18	19%	26	1%	28	<2%	NEAR NORMAL
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## E NISHNABOTNA RIVER

ATLANTIC	17	35%	21	4%	22	3%	23%	GREATER
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## E FK 102 RIVER

BEDFORD	21	18%	22	6%	23	5%	6%	GREATER
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# THOMPSON RIVER

DAVIS CITY	9	91%	12	39%	19	2%	55% GREATER
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# CHARITON RIVER

CHARITON	18	46%	21	<2%	23	<2%	28% GREATER
MOULTON	35	10%	36	<2%	37	<2%	NEAR NORMAL

# S FK CHARITON RIVER

PROMISE CITY	18	71%	24	<2%	27	<2%	18% GREATER
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## KEY FOR THE ABOVE TABLE...

STG = STAGE (FEET)

PCT = PERCENT

DEP = DEPARTURE FROM NORMAL

THE BELOW TABLES SHOW THE PERCENTAGE CHANCES OF AREA RIVERS RISING ABOVE AND FALLING BELOW VARIOUS STAGES OVER THE NEXT 90 DAYS. THESE PROBABILITIES ARE CALLED EXCEEDANCE AND NON EXCEEDANCE PROBABILITIES RESPECTIVELY.

IN TABLE 1 BELOW...THE 90 THROUGH 10 PERCENT COLUMNS INDICATE EXCEEDANCE PROBABILITIES /THE CHANCES OF THE RIVER RISING ABOVE THE LISTED STAGE LEVELS/ FOR THE NEXT 90 DAYS.

IN TABLE 2 BELOW...THE 90 THROUGH 10 PERCENT COLUMNS INDICATE NON EXCEEDANCE PROBABILITIES /THE CHANCES OF THE RIVER FALLING BELOW THE LISTED STAGE LEVELS/ FOR THE NEXT 90 DAYS.

HERE ARE SOME EXAMPLES USING THE TABLES BELOW...

THE DES MOINES RIVER AT FORT DODGE HAS A FLOOD STAGE OF 10 FEET. TABLE 2 SHOWS THAT IN THE NEXT 90 DAYS THERE IS A 10 PERCENT CHANCE OF THE STAGE REACHING 19.3 FEET.

ALSO...THE CEDAR RIVER AT CEDAR FALLS HAS A FLOOD STAGE OF 88 FEET. TABLE 3 SHOWS THAT IN THE NEXT 90 DAYS THERE IS A 10 PERCENT CHANCE OF THE STAGE FALLING TO 77.4 FEET.

...TABLE 2...EXCEEDANCE PROBABILITIES...

## CHANCE OF EXCEEDING STAGES AT SPECIFIC LOCATIONS VALID FEB. 22 2010 - MAY 22 2010

LOCATION	FS (FT)	90%	80%	70%	60%	50%	40%	30%	20%	10%
IOWA RIVER										
ROWAN	11	13.8	14.0	14.4	14.7	14.8	15.0	15.3	15.8	17.0

MARSHALLTOWN	18	17.9	18.6	18.9	19.2	19.4	19.9	20.2	20.9	21.7
CEDAR RIVER										
WAVERLY	11.5	8.6	9.0	9.3	9.5	9.9	10.3	11.0	12.1	14.3
JANESVILLE	11	8.0	8.7	9.2	9.4	10.1	10.7	11.4	13.0	14.7
CEDAR FALLS	88	90.7	91.2	92.1	92.5	92.9	93.6	93.9	95.4	97.1
WATERLOO	12	14.6	15.3	16.3	16.9	17.2	18.1	18.7	20.5	22.3
W FK CEDAR RIVER										
FINCHFORD	12	13.7	14.2	14.7	15.1	15.5	15.9	16.6	17.2	18.6
WINNEBAGO RIVER										
MASON CITY	7	8.6	9.1	9.3	9.7	10.0	10.4	10.8	12.3	14.7
SHELL ROCK RIVER										
SHELL ROCK	12	12.9	13.1	13.4	13.6	13.8	14.0	14.2	15.4	16.5
BEAVER CREEK										
NEW HARTFORD	10	8.9	9.8	10.5	10.7	10.9	11.3	11.5	12.0	13.2
S SKUNK RIVER										
AMES 3N	14	8.8	9.5	10.0	10.3	10.6	10.7	11.0	11.4	13.1
AMES HWY 30	20	20.0	21.4	21.8	22.1	22.3	22.8	23.3	23.7	24.5
COLFAX	17	16.3	17.1	17.7	18.0	18.3	18.6	19.5	20.2	22.0
OSKALOOSA	20	19.4	20.3	20.9	21.1	21.3	22.3	22.7	23.1	24.5
SQUAW CREEK										
AMES	9	6.6	7.8	8.2	8.7	10.4	11.2	12.6	13.1	14.3
DES MOINES RIVER										
ESTHERVILLE	7	11.2	12.0	12.2	12.6	12.9	13.6	14.1	14.6	15.3
EMMETSBURG	10	11.8	12.1	12.4	12.6	12.7	12.9	13.4	13.7	14.4
HUMBOLDT	8	11.8	12.0	12.6	13.4	13.9	14.2	14.7	15.1	15.9
FORT DODGE	10.5	12.9	13.6	14.0	15.0	15.4	15.9	16.4	17.4	19.3
STRATFORD	14	22.0	22.9	24.0	24.8	25.9	26.6	27.6	29.1	31.9
DSM-2ND AVE	23	20.5	21.4	21.5	23.0	25.3	27.4	28.5	29.2	31.4
DSM-SE 6TH	24	25.0	25.9	26.8	27.7	28.8	30.4	31.0	31.6	32.5
EDDYVILLE	61	61.2	61.4	61.6	61.9	62.3	62.7	64.0	65.3	69.6
OTTUMWA	11	9.8	10.2	10.5	10.9	11.4	11.6	12.6	13.6	18.1
E FK DES MOINES RIVER										
ALGONA	14	20.2	20.7	21.1	21.4	21.9	22.3	22.8	23.2	23.8
DAKOTA CITY	20	19.3	20.0	20.5	21.0	21.6	22.1	23.0	24.1	25.6
BOONE RIVER										
WEBSTER CITY	12	10.3	11.3	11.9	12.7	12.9	13.5	14.0	15.2	16.4
BEAVER CREEK										
GRIMES	12	11.8	12.0	12.3	12.5	12.6	13.0	13.1	13.3	13.8

N RACCOON RIVER

JEFFERSON	19	16.2	17.3	17.9	18.5	19.0	19.6	20.2	20.6	21.1
PERRY	15	19.1	20.5	21.2	22.0	22.4	22.9	24.9	25.8	27.7

S RACCOON RIVER

REDFIELD	20	10.4	11.0	11.6	11.8	12.5	13.0	13.8	14.7	15.2
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RACCOON RIVER

VAN METER	16	17.2	19.1	19.5	19.7	20.0	20.6	21.2	21.9	22.9
DSM-HWY 28	32	34.4	35.7	36.2	36.4	36.8	37.6	38.4	39.4	40.5
DSM-FLEUR DR	12	14.7	16.4	17.3	17.5	18.1	19.1	20.0	21.4	23.1

NORTH RIVER

NORWALK	18	20.2	21.2	21.3	21.5	21.7	21.8	22.2	22.4	22.6
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MIDDLE RIVER

INDIANOLA	19	15.2	16.0	16.4	16.9	17.4	18.1	18.7	20.4	21.8
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SOUTH RIVER

ACKWORTH	26	13.6	14.0	14.2	14.9	15.3	15.9	18.4	19.3	21.4
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CEDAR CREEK

BUSSEY	18	13.0	14.2	14.9	15.8	16.0	16.5	16.9	18.2	20.7
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E NISHNABOTNA RIVER

ATLANTIC	17	10.6	12.1	13.4	14.0	14.8	16.4	17.8	18.7	20.0
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E FK 102 RIVER

BEDFORD	21	16.1	17.5	17.8	18.6	19.0	19.5	20.0	20.8	21.3
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THOMPSON RIVER

DAVIS CITY	9	9.1	9.8	10.5	11.0	11.3	11.9	13.3	14.6	15.8
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CHARITON RIVER

CHARITON	18	16.3	16.8	17.1	17.4	17.9	18.2	18.3	18.6	19.1
MOULTON	35	26.1	27.5	29.5	30.6	32.1	32.8	33.6	34.6	34.9

S FK CHARITON RIVER

PROMISE CITY	18	13.6	15.5	18.0	18.9	19.2	19.7	20.1	20.5	21.9
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...TABLE 3...NON EXCEEDANCE PROBABILITIES...

CHANCE OF FALLING BELOW STAGES AT SPECIFIC LOCATIONS  
VALID FEB. 23 2010 - MAY 24 2010

LOCATION	FS (FT)	90%	80%	70%	60%	50%	40%	30%	20%	10%
IOWA RIVER										
ROWAN	11	4.0	4.0	4.0	4.0	4.0	4.0	3.9	3.9	3.9

MARSHALLTOWN	18	9.8	9.7	9.7	9.7	9.7	9.7	9.7	9.6	9.6
CEDAR RIVER										
WAVERLY	11.5	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8	3.8
JANESVILLE	11	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
CEDAR FALLS	88	77.5	77.5	77.5	77.5	77.5	77.5	77.4	77.4	77.4
WATERLOO	12	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
W FK CEDAR RIVER										
FINCHFORD	12	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
WINNEBAGO RIVER										
MASON CITY	7	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
SHELL ROCK RIVER										
SHELL ROCK	12	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
BEAVER CREEK										
NEW HARTFORD	10	3.7	3.6	3.6	3.6	3.6	3.6	3.6	3.5	3.4
S SKUNK RIVER										
AMES 3N	14	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6
AMES HWY 30	20	9.2	9.2	9.2	9.1	9.1	9.1	9.1	9.1	9.1
COLFAX	17	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2
OSKALOOSA	20	8.7	8.6	8.6	8.6	8.5	8.5	8.5	8.4	8.2
SQUAW CREEK										
AMES	9	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
DES MOINES RIVER										
ESTHERVILLE	7	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1
EMMETSBURG	10	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7
HUMBOLDT	8	2.6	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5
FORT DODGE	10.5	3.9	3.9	3.9	3.8	3.8	3.8	3.8	3.8	3.8
STRATFORD	14	4.5	4.5	4.5	4.5	4.5	4.5	4.4	4.4	4.4
DSM-2ND AVE	23	13.2	13.2	13.2	13.2	13.1	13.1	13.1	13.1	13.1
DSM-SE 6TH	24	10.0	10.0	10.0	10.0	10.0	9.9	9.9	9.9	9.8
EDDYVILLE	61	49.1	49.1	49.1	49.1	49.0	49.0	49.0	48.9	48.9
OTTUMWA	11	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6
E FK DES MOINES RIVER										
ALGONA	14	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9
DAKOTA CITY	20	8.0	8.0	8.0	8.0	8.0	7.9	7.9	7.9	7.9
BOONE RIVER										
WEBSTER CITY	12	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2
BEAVER CREEK										
GRIMES	12	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.2

# N RACCOON RIVER

JEFFERSON	19	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.1
PERRY	15	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.2

# S RACCOON RIVER

REDFIELD	20	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
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# RACCOON RIVER

VAN METER	16	3.0	3.0	3.0	3.0	3.0	3.0	3.0	2.9	2.9
DSM-HWY 28	32	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.6	22.5
DSM-FLEUR DR	12	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4

# NORTH RIVER

NORWALK	18	6.3	6.2	6.2	6.1	6.1	6.0	5.9	5.8	5.7
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# MIDDLE RIVER

INDIANOLA	19	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.5
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# SOUTH RIVER

ACKWORTH	26	6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.1
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# CEDAR CREEK

BUSSEY	18	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.6	5.6
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THESE NUMBERS ARE CALCULATED USING MULTIPLE SPRING SEASON SCENARIOS FROM 30 OR MORE YEARS OF CLIMATOLOGICAL DATA. THESE NUMBERS ALSO TAKE INTO ACCOUNT CURRENT CONDITIONS OF THE RIVER...SNOW COVER AND SOIL MOISTURE...AS WELL AS 30 TO 90 DAY OUTLOOKS OF TEMPERATURE AND PRECIPITATION. BY PROVIDING THE COMPLETE RANGE OF PROBABILISTIC NUMBERS...THE LEVEL OF RISK ASSOCIATED WITH LONG-RANGE PLANNING DECISIONS CAN BE DETERMINED.

...CURRENT CONDITIONS AS OF FEBRUARY 18 2010...ALONG WITH CHANGES SINCE THE LAST FLOOD OUTLOOK ON JANUARY 29TH...

.SNOW DEPTH...SNOW DEPTH HAS INCREASED SINCE THE LAST OUTLOOK. IT IS ABOVE NORMAL ACROSS THE ENTIRE DES MOINES SERVICE AREA. THE SNOW DEPTH DEPARTURES FROM NORMAL INCREASE TOWARD THE NORTHWEST. THEY ARE MUCH ABOVE NORMAL ALONG AND NORTH OF U.S. HWY 20...ESPECIALLY IN THE DES MOINES...RACCOON...CEDAR AND IOWA RIVER BASINS. DEPARTURES FROM NORMAL RANGE FROM AS MUCH AS 20 TO 30 INCHES ABOVE NORMAL IN THE NORTHWEST...TO 2 TO 4 INCHES ABOVE NORMAL IN THE EXTREME SOUTHEAST. ACTUAL SNOW DEPTHS RANGE FROM 30 TO 40 INCHES IN THE NORTHWEST...TO 2 TO 4 INCHES IN THE EXTREME SOUTHEAST.

.SNOW WATER EQUIVALENT...VALUES HAVE INCREASED SINCE THE LAST OUTLOOK. THEY RANGE FROM 1 INCH OR LESS IN THE EXTREME SOUTHEAST...TO VERY HIGH VALUES OF BETWEEN 4 AND 6 INCHES IN THE NORTHWEST.



.STREAM LEVELS...VALUES HAVE DECREASED...RELATIVE TO NORMAL...SINCE THE LAST OUTLOOK. THEY ARE NEAR TO ABOVE NORMAL AT MOST LOCATIONS...WITH A FEW LOCATIONS REPORTING MUCH ABOVE NORMAL CONDITIONS. STREAM LEVELS HAVE BEEN NEAR TO ABOVE NORMAL ALL WINTER AT MOST LOCATIONS.

.SOIL MOISTURE...VALUES HAVE SLIGHTLY INCREASED...RELATIVE TO NORMAL...SINCE THE LAST OUTLOOK. THEY ARE MUCH ABOVE NORMAL AT MOST LOCATIONS. THE GREATEST DEPARTURES FROM NORMAL EXTEND FROM THE NORTHWEST THROUGH NORTH CENTRAL...NORTHEAST...EAST CENTRAL AND SOUTHEAST PARTS OF THE DES MOINES SERVICE AREA.

.DROUGHT CONDITIONS...DROUGHT CONDITIONS WERE NOT INDICATED...AND HAVE NOT CHANGED SINCE THE LAST OUTLOOK.

.FROST DEPTH...THERE IS LITTLE IF ANY FROST IN THE GROUND. FROST DEPTHS ARE MAINLY 4 INCHES OR LESS. FROST DEPTHS HAVE CHANGED LITTLE SINCE THE LAST OUTLOOK.

.WINTER PRECIPITATION...VALUES HAVE BEEN ABOVE TO MUCH ABOVE NORMAL. THEY RANGE FROM 150 PERCENT OF NORMAL ACROSS THE EXTREME SOUTHEAST...TO 200 PERCENT OR MORE OF NORMAL ACROSS MUCH OF THE NORTHWEST TWO THIRDS. PRECIPITATION HAS BEEN ABOVE NORMAL SINCE THE FIRST OUTLOOK.

.WINTER TEMPERATURES...VALUES HAVE BEEN BELOW NORMAL. THEY RANGE FROM AROUND 2.5 DEGREES ABOVE NORMAL IN THE NORTHEAST...TO AROUND 5.5 DEGREES BELOW NORMAL ACROSS THE SOUTHWEST. AVERAGE TEMPERATURES HAVE BEEN BELOW NORMAL SINCE THE FIRST OUTLOOK.

...ONE AND THREE MONTH CLIMATE OUTLOOKS...

.ONE MONTH OUTLOOK /FOR MARCH/...BELOW NORMAL TEMPERATURES ACROSS THE SOUTHERN HALF OF THE DES MOINES SERVICE AREA...AND EQUAL CHANCES FOR ABOVE...BELOW...AND NEAR NORMAL TEMPERATURES ACROSS THE NORTHERN HALF. EQUAL CHANCES FOR PRECIPITATION. EQUAL CHANCES MEANS THAT THERE ARE NO STRONG INDICATORS OF ABOVE...BELOW OR NEAR NORMAL CONDITIONS.

.THREE MONTH OUTLOOK /FOR MARCH THROUGH MAY/...EQUAL CHANCES FOR BOTH TEMPERATURES AND PRECIPITATION.

...ADDITIONAL INFORMATION...

THE NEXT OUTLOOK WILL BE ISSUED ON FRIDAY...MARCH 5 2010.

ADDITIONAL INFORMATION IS AVAILABLE AT OUR WEB SITE...  
[HTTP://WWW.WEATHER.GOV/DESMOINES](http://www.weather.gov/desmoines) .

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